

REMARKS

This paper responds to the Final Office Action mailed on April 15, 2009.

Claims 1, 3, 22, 24, 43 and 45 are amended, no claims are canceled, and no claims are added. Support for the amendments to the claims is found in at least paragraphs [0102]-[0105] of the specification as filed. As a result, claims 1, 3-10, 13-15, 22, 24, 26, 28, 30-31, 43-45 and 47 are now pending in this application.

Premature Final Action

The Examiner indicated that the Office Action is final. The Applicant respectfully submits that the finality of the Office Action was premature and therefore improper.

MPEP 706.07 discusses final rejections or actions and states that “*before final rejection is in order a clear issue should be developed between the examiner and the Applicant*” (emphasis added) and “*the Applicant who is seeking to define his or her invention in claims that will give him or her the patent protection to which he or she is justly entitled should receive the cooperation of the examiner to that end, and not be prematurely cut off in the prosecution of his or her application.*” In the present case, a RCE was filed following an Advisory Action from the Examiner indicating that proposed amendments contained in the Applicant’s reply filed 26 November 2008 “*raises new issues that would require further consideration and/or search.*”

The latest Office Action is the first action to address the new issues raised by the amendments and arguments contained in the reply of 26 November 2008 and repeated with the Request for Continued Examination, and this reply is therefore the Applicant’s first opportunity to address the Examiner’s rejection of and arguments regarding the “new issues” raised. As such, it is patently not possible for a clear issue to have developed between the Examiner and the Applicant, as required by the MPEP.

Note should also be taken of MPEP 706.07(b), which states: “*However, it would not be proper to make final a first Office action in a continuing or substitute application or an RCE where that application contains material which was presented in the earlier application after final rejection or closing of prosecution but was denied entry because (A) new issues were*

raised that required further consideration and/or search, or (B) the issue of new matter was raised.”

These circumstances clearly applies to the present case and the Applicant therefore requests withdrawal of the finality of the previous Office Action.

§ 103 Rejection of the Claims

Claims 1, 3-10, 13-15, 22, 24, 26, 28, 30-31, 43-45, and 47 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Boykin et al. (U.S. 2004/023279 A1; hereafter “Boykin”) in view of Bley et al. (U.S. 7,496,896 B2; hereafter “Bley”). Additionally, claims 1, 3-10, 13-15, 22, 24, 26, 28, 30-31, 43-45, and 47 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Boykin in view of Berry et al. (6,742,178 B1; hereafter “Berry”). Applicant respectfully traverses and submits that the Examiner failed to establish a *prima facie* case for obviousness of the claims.

1) *The Applicable Law*

As discussed in *KSR International Co. v. Teleflex Inc. et al.* (U.S. 2007), the determination of obviousness under 35 U.S.C. § 103 is a legal conclusion based on factual evidence.¹ The legal conclusion, that a claim is obvious within § 103(a), depends on at least four underlying factual issues set forth in *Graham v. John Deere Co. of Kansas City*:² (1) the scope and content of the prior art; (2) differences between the prior art and the claims at issue; (3) the level of ordinary skill in the pertinent art; and (4) evaluation of any relevant secondary considerations.

Therefore, the test for obviousness under §103 must take into consideration the invention as a whole.³ The Examiner must, as one of the inquiries pertinent to any obviousness inquiry under 35 U.S.C. §103, recognize and consider not only the similarities but also the critical

¹ See *Princeton Biochemicals, Inc. v. Beckman Coulter, Inc.*, 7, 1336-37 (Fed. Cir. 2005).

² 383 U.S. 1, 17 (1966).

³ See MPEP 2141.02 I, citing, *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983); *Schenck v. Nortron Corp.*, 713 F.2d 782, 218 USPQ 698 (Fed. Cir. 1983).

differences between the claimed invention and the prior art.⁴ The fact that a reference teaches away from a claimed invention is highly probative that the reference would not have rendered the claimed invention obvious to one of ordinary skill in the art.⁵ When the prior art teaches away from combining certain known elements, discovery of a successful means of combining them is more likely to be non-obvious.⁶ Additionally, critical differences in the prior art must be recognized (when attempting to combine references).⁷

2) *Application of § 103 to the Rejected Claims*

Claim 1 is amended to expedite grant of the application and recites, in part: “*modifying a method information structure for each method associated with the software application by adding byte code instructions to said method information structure to cause a **plug-in handler method associated with a plug-in handler to execute an output function for each method, the plug-in handler to record method information associated with methods at each entry point and exit point, modification of the method information structure for each method comprising inserting function calls at entry points and exit points of each method associated with the software application via a bytecode modifier, the method further comprising compiling results of the modified classfile and providing the results to a graphical user interface to create a graphical representation of the results, the results including method information, the method information including a **dependency hierarchical tree indicating dependency order of the methods, and a time hierarchical tree indicating chronological order of the methods; and filtering the method information, via a filtering module, according to user preferences and the dependency and time hierarchical trees*****” (emphasis added).

In contrast, Boykin, Berry, and Bley fail to disclose a number of the claim elements of claim 1.

⁴ See *In re Bond*, 910 F.2d 831, 834, 15 USPQ2d 1566, 1568 (Fed. Cir. 1990), reh'g denied, 1990 U.S. App. LEXIS 19971 (Fed. Cir.1990).

⁵ *Siranco Inc. v. Atlantes Chemical Systems, Inc.*, 15 USPQ2d 1704, 1713 (Tex. 1990).

⁶ *Id.* p. 4 citing *United States v. Adams*, 383 U.S. 39, 51-51 (1966).

⁷ *In re Bond*, 910 F.2d 831, 834, 15 USPQ2d 1566, 1568 (Fed. Cir. 1990), reh'g denied, 1990 U.S. App. LEXIS 19971 (Fed. Cir.1990).

First, the cited references are wholly silent as to the compiling of method information which includes a dependency hierarchical tree or a time hierarchical tree. The Examiner took the position that this element is indeed taught by Boykin and referenced paragraph [0079] as well as FIG. 4B and related text.⁸ Applicant respectfully traverses.

Paragraph [0079] explains differences between the invention of Boykin and prior art solutions, but does not relate explicitly or implicitly to method information which includes a dependency hierarchical tree or a time hierarchical tree:

“[0079] The advantages of the present invention should be apparent in view of the detailed description of the invention that is provided above. Unlike other prior art solutions that contain a component similar to the injector of the present invention, the injector does not decompile a class file that is to be instrumented, add the special instrumentation code, and then recompile the modified class.”

Likewise, FIG. 4B shows a diagrammatic representation of runtime components, but neither FIG. 4B nor the related text describes or suggests the compilation of method information which includes dependency and time hierarchical tree. FIG. 4B's related text, which follows, clearly does not disclose or suggest this claim element:

“Referring to FIG. 4B, injector 410 has created modified class files 412 by injecting hooks 414 into the original class files; class files 412 are similar to manageable classes 216 that are shown in FIG. 2. Injector 410 can determine whether to inject a hook into a recently loaded class by querying the probe registry 416, e.g., by using an identifier of the recently loaded class, which may be provided to injector 410 through class load event notification 408; probe registry 416 is similar to registry 206 that is shown in FIG. 2.”⁹

Secondly, none of the cited references teaches filtering of method information according to user preferences and the dependency and time hierarchical trees. Again, the Examiner asserted that Boykin discloses this claim element, but the portion of Boykin which is referenced to support this assertion (i.e., paragraph [0054]) does not describe or suggest filtering method information according to dependency and time hierarchical trees. That is, the cited paragraph is wholly silent on filtering according to dependency or time hierarchical trees. In contrast, filtering according to paragraph [0054] of Boykin may be according to class or by specified

⁸ Office Action, page 4, line 4.

⁹ Boykin, paragraph [0046].

parameters, which is distinct from filtering according to dependency and time hierarchical trees.

Thus:

"[0054] An example of a probe registration file that contains probes, locations, and associations is shown in Table 1. Probed classes can be specified individually or through filters, such as specifying all classes that directly extend class "HttpServlet" or specifying all classes in package "com.ibm.websphere" that directly implement the "SessionBean" interface. In a manner similar to classes, probed methods can be specified individually or through filters, such as all "**public**" methods or all methods with parameter list "(byte[], int, int)." (emphasis added)

It is to be appreciated that the filtering described in paragraph [0054] of Boykin can logically not be according to time or dependency hierarchical trees, as the hierarchical tree information is method information included in **the results** of the modified classfile. In contrast, the filtering described in paragraph [0054] of Boykin is based on information contained in the method code.

Further elements of claim 1 which are not disclosed by the cited references include: the provision of results of the modified classfile **to a graphical user interface** to create a **graphical representation of the results**; modifying the method information to cause the execution of an **output function for each method**;¹⁰ and execution of an output function by a **plug-in handler**.

Neither Bley nor Berry provide the limitations that are lacking in Boykin. As none of the references provides the claim elements discussed above, no combination of the references can provide these elements, and it is therefore asserted that the Examiner failed to establish a *prima facie* case for non-obviousness of claim 1. Independent claims 22 and 43 also include the above-discussed claim elements, and it is thus asserted that no *prima facie* case for non-obviousness of claims 22 and 43 were established.

In addition, any claim depending from a non-obvious independent claim is also non-obvious.¹¹ Therefore, claims 3-10, 13-15, 24, 26, 28, 30, 31, 44, 45, and 47 are also in condition for allowance, and Applicant respectfully requests reconsideration and withdrawal of the

¹⁰ FIGs. 11A and 11B illustrate two modes of modification of method code according to Boykin, and it is to be noted with reference to the description of 11B that no output function is produced by execution of the method of FIG. 11B.

¹¹ See MPEP § 2143.03.

rejections of claims 1, 3-10, 13-15, 22, 24, 26, 28, 30-31, 43-45, and 47 under 35 U.S.C. §
103(a).

Title: MODIFIED CLASSFILE REGISTRATION WITH A DISPATCH UNIT THAT IS RESPONSIBLE FOR DISPATCHING INVOCATIONS DURING RUNTIME EXECUTION OF MODIFIED BYTECODE

CONCLUSION

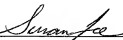
Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone the undersigned at (408) 278-4042 to facilitate prosecution of this application.

If necessary, please charge any additional fees or deficiencies, or credit any overpayments to Deposit Account No. 19-0743.

Respectfully submitted,

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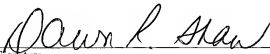
Date June 4, 2009

By 
Susan Yee
Reg. No. 41,388

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 4 day of June, 2009.

Dawn R. Shaw

Name


Signature